AMENDMENT

In the claims

Please cancel all pending claims and replace them with the following new claims:

7. (new) A method for delivery of a composition to cells of a vessel in a subject, comprising:

advancing a catheter to a location in the vessel where the composition is to be administered, wherein the catheter comprises at least one balloon portion and at least one electrode for effecting electroporation, wherein the balloon portion is distal to the electrode(s);

inflating the balloon portion to prevent fluid flow in the vessel and thereby allow sustained delivery of the composition in conjunction with electroporation;

administering the composition to the vessel in the subject; and

applying at least one electrical impulse using the electrode(s) to generate an electric field of sufficient strength to effect electroporation of at least one cell of the vessel such that the composition is delivered into the at least one cell of the vessel.

8. (new) The method of claim wherein, wherein after the electrical impulse(s) is applied the balloon portion is deflated to restore fluid flow in the vessel and the catheter is withdrawn.

9. (new) The method of claim 7, wherein the composition is selected from the group consisting of an antithrombotic, an antirestenoitic, an antiplatelet, a platelet receptor, a mediator inhibitor, a growth factor inhibitor, an antibody, an anti-inflammatory, and an antiproliferative composition.

10. (new) The method of claim 7, wherein the composition is selected from the group consisting of heparin, hirulog, tPA, urokinase, streptokinase, cyclosporin, antistatin, and warfarin.

11. (new) The method of claim 7, wherein the electrical impulse applied is from about 50 volts to about 500 volts.

12. (new) The method of claim 7, wherein the electrical impulse applied has a duration of about 100 microsecs to 100 milliseconds.

13. (new) The method of claim 12, wherein the electrical impulse applied has a duration of from about 500 microsecs to 10 milliseconds.

14. (new) The method of claim 7, wherein the administering of the composition and the

application of the electrical impulse are substantially contemporaneous.

15. (new) The method of claim 7, wherein the administering of the composition is before the application of the electrical impulse.

16. (new) The method of claim 7, wherein the electrical impulse(s) is selected from the group consisting of a square wave pulse(s), an exponential wave(s), a unipolar oscillating wave form(s) of limited duration, and a bipolar oscillating wave form(s).

17. (new) The method of claim 7, wherein from 1 to about 10 electrical pulses are applied.

18. (new) The method of claim 7, further comprising using iontophoresis for delivery of the composition to the cell.

19. (new) The method of claim 7, wherein the vessel is a blood vessel.

20. (new) The method of claim 7, wherein the vessel is a lymph vessel.

21. (new) The method of claim 7, wherein said cell of the vessel is in the adventitial region of the vessel.

22. (new) A method for the delivery of a composition to a cell(s) of a vessel in a subject, the method comprising:

administering the composition to the vessel of a subject using a catheter comprising:

(a) at least one inflatable balloon portion;

(b) at least one infusion opening through which the composition is administered to the subject;

(c) at least a first electrode positioned adjacent to at least one infusion opening; and

(d) at least a second electrode positioned with respect to the first electrode and the subject such that an electric field sufficient to cause electroporation of at least one cell in the vessel can be generated when an electrical impulse is provided;

inflating the balloon portion to stop fluid flow in the vessel and administering the composition through the infusion opening; and

applying an electrical impulse to generate an electric field between the first and second electrodes sufficient to electroporate at least one cell of a vessel such that the composition is delivered locally into the vessel and is retained in the vessel for sustained delivery.

23. (new) The method of claim 22, wherein said cell is in the medial region of the vessel.

24. (new) The method of claim 22, wherein the composition is a polynucleotide.

25. (new) The method of claim 24, wherein the polynucleotide encodes a polypeptide selected from the group consisting of vascular endothelial growth factor (VEGF), endothelial specific mitogen, platelet derived growth factor, fibroblast growth factor, and interferon.